

VELFAC®

ADVANCED WINDOW DESIGN

User Guide



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Welcome to VELFAC Advanced Window Design. Our commitment to quality ensures that your VELFAC windows will retain their looks and functionality for years with the minimum of care.

Please feel free to contact us if you have any questions which are not answered in this User Guide.

Kind regards
VELFAC LTD

T: 01223 897100
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In this guide you will find an introduction to some of the benefits of VELFAC windows, questions and answers regarding your 12 Year Warranty, and information about our environmental policies. You will also find useful tips on the security of your property, and advice about condensation and how to prevent it.

Detailed recommendations on the care of your windows can be found on pages 14 & 15, and an introduction to the VELFAC Customer Service team is provided on pages 18 & 19, which include recommendations for damage, break-ins or operation failure.

On page 20 you will find a guide to establish which VELFAC window system you own, and page 21 contains illustrations and an explanation of the technical terms used in this guide to describe the functionality of your windows.

Page 22 onwards describes how to use your windows, and provides information on minor adjustments.

We hope that by using this guide, you will be able to make the most of your VELFAC windows and enjoy them for many years to come.



Life and light

We ensure that VELFAC windows use the best raw materials available, sourced from environmentally conscious suppliers. The combination of high performance glazing, internal wood frame and external aluminium sash provides a service lifetime of 40 years or more.

Light generates a feeling of well being so it is essential to bring light into our homes. The slim frame of a VELFAC window lets in significantly more natural daylight than traditional alternatives. This increases the feeling of light, space and warmth within a room and creates a relaxing atmosphere in which you can unwind and re-charge your batteries.

Energy efficiency

It has been proved that windows and doors are the main sources of heat loss from a building. In order to reduce this loss, it is important that high performance windows are installed.

The pine frame of a VELFAC window possesses the natural insulating properties of wood.

The double-glazing incorporates a low-energy coating and contains argon between the panes of glass - the argon provides better insulation than air.

The slim frame also allows more light to enter the room, generating free heat from the sun known as solar gain.

This combination means that your windows are some of the most energy efficient around.





Secured by Design

Secured by Design is an initiative launched by the Association of Chief Police Officers Crime Prevention Initiatives, and is backed by the Home Office Crime Reduction Unit. The programme encourages the building industry to adopt crime prevention measures as part of development design. The aim is to reduce the opportunity for crime, and the fear of potential crime, resulting in a safer and more secure environment.

VELFAC windows have been put through several severe tests which replicate forced entry, and the following opening functions are Secured by Design accredited:

VELFAC 200 Sidehung window

VELFAC 200 Fixed window

VELFAC 200 Tophung projecting window

VELFAC 200 Patio door



Feel secure

Burglars can enter a building through a window either by breaking the glass or frame, picking the lock, or removing the glass panes entirely. VELFAC windows resist all such forms of attack.

VELFAC windows are internally beaded so it is impossible to remove the glass from the outside; the double glazed panes require considerable force - and resulting noise - to break; and frames are designed to withstand even the most determined criminal.

Lockable handles can further enhance the security of each window, and specially designed child locks also provide a safer environment for families.



Stop the thief - before he breaks in

- Make it look like you're at home, even if you're out
- If you go away, ask your neighbour to empty your letterbox and use your dustbin
- Install movement responsive sensor lights outside
- Place valuables out of sight



A friend of the environment

VELFAC has long recognised the need to care for and protect the environment, and this philosophy lies at the heart of all that the company does; a unique demonstration of how a major manufacturer can implement an effective environmental policy.

VELFAC applies strict principles to every stage of the design, production and installation process: wood is sourced from controlled forests practising sustained management; local wind farms provide the majority of power to our manufacturing facilities, surface treatments are 100% water-based; and hydroelectricity contributes to the production of aluminium, a proportion coming from re-cycled sources.

Environmental Declaration

In order to measure the real impact of a product upon the environment, all aspects - such as energy consumption, use of resources or waste disposal - must be analysed at all stages of a window's life.

In collaboration with the Technological Institute in Denmark, VELFAC has undertaken a 'cradle to grave' analysis of window performance, with the results published as an 'Environmental Declaration'. The document contains an analysis of all materials used in window production, and gives a measure of environmental impact across five distinct areas:

1. Raw materials
2. Production processes
3. Window performance and use
4. Disposal
5. Transport

To download a copy, please visit www.VELFAC.co.uk





Raw materials

The quality of the raw materials used is fundamental to the lifetime performance of each VELFAC window. By using only the best materials we achieve the highest level of performance from our windows. For example:

- Pine trees used in the production of frames for VELFAC windows are grown in northern forests, which mean they mature slowly - as a result the wood is denser and harder-wearing than standard pine
- Low-energy double-glazed units are used as standard in all VELFAC windows, delivering better insulating properties
- Polyester powder coated aluminium is extremely weather resistant and does not rust or corrode
- Only water-based fungicides, lacquers and paints are used - as well as being vapour-free, they are also more environmentally friendly

Manufacturing processes

Our objective is to develop highly efficient manufacturing processes which do not lose sight of the value of individual craftsmanship.

We aim to streamline our production flow whilst encouraging the individual to constantly assess the quality of each stage in the process and each part of the finished product.

Wherever possible, we exploit the latest technology - computer-driven machinery is commonplace, and automatic systems surface-treat and dry frames quickly.

Team responsibility is actively encouraged to ensure production standards remain consistently high. Random independent inspection of finished windows further ensures quality standards are maintained.





Aircraft engines are used to generate wind pressure against VELFAC windows, to test their resistance to the extreme forces of nature.

Testing

Millions of VELFAC windows are installed across Europe and thousands of people test them every day. Despite our highly successful track record, we maintain a demanding testing programme to ensure our windows continue to satisfy, and often exceed all necessary regulatory standards. Our windows have been tested by Europe's most rigorous standards agencies, which have analysed all aspects of window design and performance.

This tough programme of testing ensures that your windows are at the forefront of window technology and will perform for many years.

12 Year Product Warranty

Over 50 years experience in window manufacture lies behind every VELFAC window. This experience, combined with our testing programme, enables us to offer a comprehensive warranty of 12 years on our windows and double-glazed units.

This warranty is one of the best offered by any window supplier, and reflects the confidence we have in the quality of our product, guaranteeing the performance in all weather conditions.

A national system of service support ensures a fast and efficient response to any issues which may arise. For more information on VELFAC Customer Service, please consult pages 18 & 19.





Your windows will need more regular maintenance if they are exposed to strong sunlight on South facing facades, if you live in a marine or industrial environment, or if you have high levels of internal humidity.

How to care for your VELFAC windows

The correct cleaning and maintenance of your windows will keep them looking good and ensure they will resist even the harshest weather conditions for years to come.

Washing and oiling. Once installed, a VELFAC window virtually takes care of itself - all it needs is regular cleaning, and oiling of the hinges, handle and locking mechanism with acid-free oil at least once a year. Pages 22-37 contain diagrams showing the parts which require oiling, indicated by 2 drops of oil. 📄

Windows should be cleaned with a soft cloth or soft bristle brush and luke warm water with a few drops of mild detergent - detergents must not contain solvent or abrasive. To dry the window, use a window scraper, or wipe with a slightly damp Chamois leather or fine cloth.

Traces left on the glass after removing stickers can be removed with meths or other alcohol based substances - care must be taken to avoid contact with other parts.

These maintenance instructions must be followed to ensure that your warranty remains valid.

How to care for your VELFAC windows

The external window sash is made from aluminium with a powder coated finish. It will need cleaning at least once every year with a soft cloth or soft bristle brush and luke warm water with a few drops of mild detergent. If any material (such as paint, wet concrete etc.) splashes on to this surface, it must be washed off immediately.

A scratch will not affect the durability of the sash as the aluminium will form a natural layer of oxide, however, **scratches should be repaired immediately to ensure that your warranty remains valid.**

The internal window frame is manufactured from pine which has been coated with a water-based lacquer or paint. The frame should be dusted and wiped clean regularly. Minor scratches can be repaired with water-based diffusion open paint or lacquer, although contact with other window materials should be avoided.

The glazing bead, weather seals and gaskets (see page 21 for more information) should be cleaned using a damp cloth.



Wood is a natural product containing resin. Occasionally beads of crystallised resin may form on the surface of the frame. These beads can be removed by gently rubbing with a cloth dampened with meths or other alcohol based substance.



Did you know that:

- You must air new-build properties more regularly than old ones - this also applies to refurbishments or extensions
- People give off approximately 2L of water every 24 hours - airing is the only way to remove it
- Damp indoor climates may cause headaches, coughing, sore eyes, allergies and skin problems

Condensation on your windows (inside)

Formation of condensation on the inside of your windows is a natural occurrence, which cannot be completely avoided. It forms when warm moisture held in the internal atmosphere cools against the glass and forms small droplets of water. Because warm air can hold more moisture, condensation increases as the room temperature is lowered and improves as the temperature rises. Moisture running on to the wood frame may generate fungus or discolouration.

There are three important measures to combat condensation:

1. Rooms should be aired thoroughly two or three times a day for at least 10 minutes, especially after baths or showers, cooking, or if clothes are dried inside
2. A consistent indoor temperature of 20-22°C should be maintained
3. Good air circulation in all rooms should be ensured

Condensation on your windows (outside)

Due to the low-energy double-glazing used in VELFAC windows, condensation may form on the outside. During colder months, the outer pane cools further than the inner pane and moisture in the external atmosphere forms small droplets of water against the glass. This kind of condensation is completely harmless to the window and will disappear as the external temperature increases.

Condensation between the two glazing panes. If condensation forms between the two glazing panes, the sealed double-glazed unit has been punctured and must be replaced. Please call the VELFAC Service Department on 01223 897100.

If condensation has recently formed, it may be due to:

- Recently installed windows which are completely air tight
- Installation of under floor heating
- New curtains
- Moisture in new houses
- it may take as long as a year to dry a new house completely
- The season - condensation is more likely in autumn and winter



When you contact the Police to report a suspected crime, ensure you seek advice on how to preserve the scene for forensic examination prior to clearing.

Operation failure, damage or break-ins

If the window cannot be easily operated, check for any outside obstructions and remove. If the window resists closing, check for obstructions between the moving aluminium sash and the fixed timber mainframe.

Ensure that no debris is obstructing the slide motion of the moving arm.

If the window is operable after being damaged by forced entry or accident, it should be closed and secured. If the glass unit has been broken, any remains should be carefully removed taking all necessary safety precautions i.e. wearing protective clothing such as gloves, safety glasses, suitable footwear etc.

To restore building security, temporary glazing material (such as plywood or similar) may be glazed into the aluminium sash profile until a replacement glass unit is available.

In order to ensure your product warranty is maintained, please contact VELFAC Customer Service to arrange repair of windows or to supply and fit replacement glass units.

VELFAC Customer Service

A national system of service support ensures a fast and efficient response to any issues which may arise. A wide range of modifications and repairs are possible through VELFAC Customer Service including:

- Supply and installation of replacement double-glazed units
- Supply and installation of replacement components
- Repair of damaged wood frames or aluminium sashes
- Conversion of fixed windows to opening
- Retro-fitting of opening restrictors
- Retro-fitting of electric motor openers

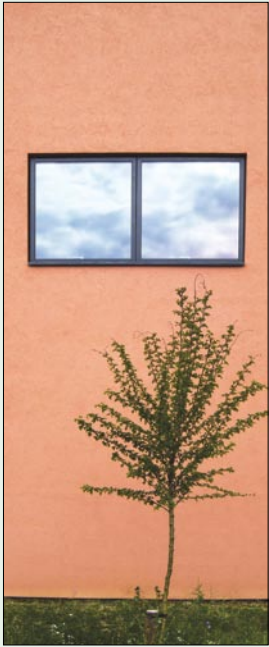
All our Service Engineers undergo a comprehensive training programme that equips them with interpersonal and problem solving skills, and in depth product knowledge. Using a VELFAC Engineer will ensure your 12 Year Product Warranty is maintained.

VELFAC Customer Service: 01223 897100

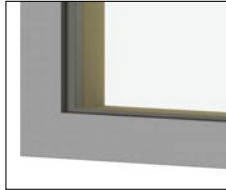


All VELFAC windows carry a unique identity tag to enable immediate tracing of spare parts should damage occur.

Which type of window do you have?



VELFAC 200



You need to establish which VELFAC window system you have to understand how they operate and what adjustments are possible.

Please take a look at the diagrams and the descriptions to decide which of VELFAC 200, VELFAC 400 or VELFAC 100 windows you own.

VELFAC 400



VELFAC 100

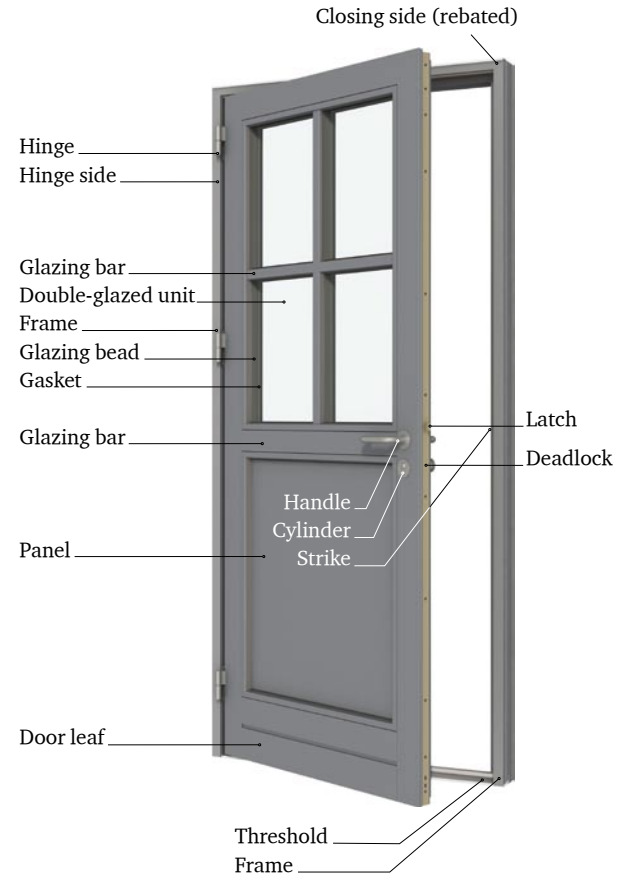
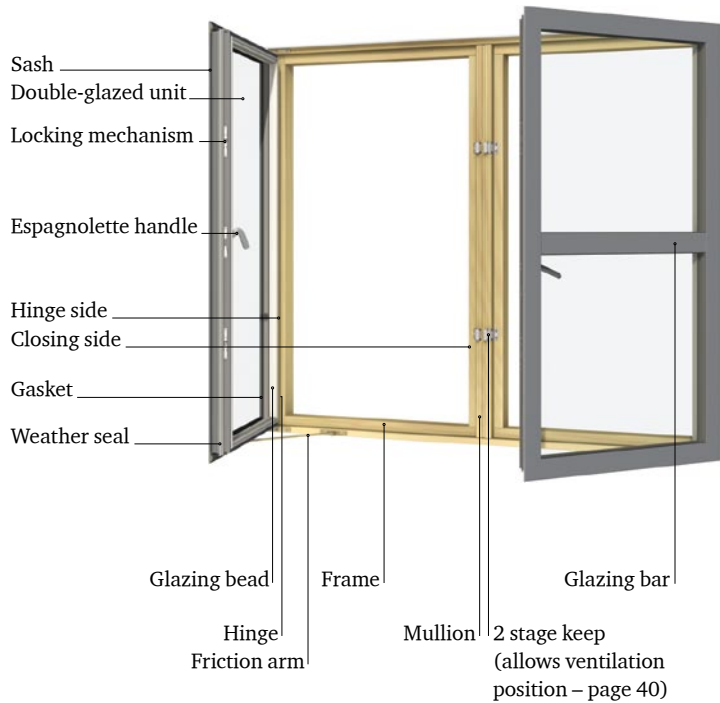


VELFAC 200 windows have a single sightline on the external side.

VELFAC 400 windows have a double sightline on the external side.

VELFAC 100 windows are inward opening.

Technical terms



This window is equipped with:

See more

Espagnolette handle	40
Ventilation position	41
Friction arm	43

It can also be fitted with:

See more

Espagnolette handle with child-lock	40
Espagnolette handle with lock	40
Espagnolette handle for cylinder lock	40
Electric opener for remote operation	41
PN-fitting	42
Integral blind	42
Window stay	42
Safety restrictor	42
Lockable restrictor	43
Click vent	43

Sidehung window

This window is opened by turning the handle to a horizontal position and pushing the sash outwards. The window opens to 90° and is equipped with a friction arm which allows the sash to be held in any position between closed and fully open.

The window is closed by pulling the sash back to the frame and returning the handle to the vertical position.

Double leafed windows can be supplied with different types of mullion - see page 39 for more information.



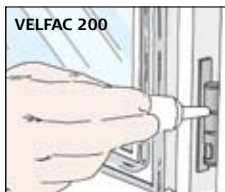
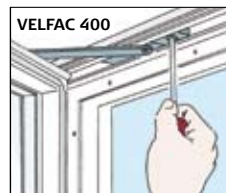
Double leafed window

Sidehung window

Friction arm adjustment. The friction arm, found at the bottom edge (or occasionally top), can be adjusted by turning the friction bolt using a 4mm hexagon key.

Care. It is important to keep the slide rails free of dust and dirt by using a soft brush or cloth. The slide rails should not be oiled as this will accumulate dust and dirt, and remove friction.

The hinges require oiling at least once a year using acid-free oil. In order to ensure the hinges are properly lubricated, the window should be opened and closed several times during and after oiling.



Maintenance tip. If the window is situated on the ground floor, open and clean or maintain it from the outside.

This window is equipped with:

See more

Espagnolette handle	40
Ventilation position	41
Friction arm	43

It can also be fitted with:

See more

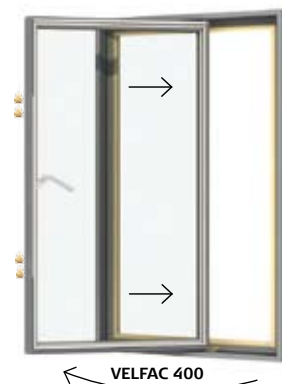
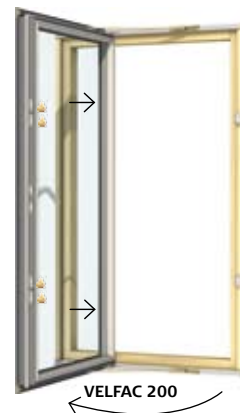
Espagnolette handle with child-lock	40
Espagnolette handle with lock	40
Espagnolette handle for cylinder lock	40
Electric opener for remote operation	41
PN-fitting	42
Window stay	42
Safety restrictor	42
Integral blind	42
Lockable restrictor	43
Click vent	43

Sidehung projecting window

This window opens by turning the handle to a horizontal position and pushing the sash outwards.

The window is closed by pulling the sash back to the frame and returning the handle to the vertical position.

Sidehung projecting windows are fitted with friction arms and guide rails which allow the window to be held in any position between closed and fully open at 90° for



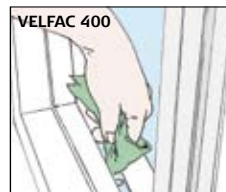
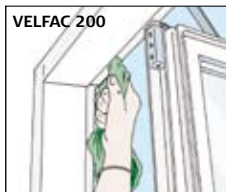
Sidehung projecting window

VELFAC 200, and 135° for VELFAC 400.

Friction adjustment. Friction in the guide rails can be adjusted by turning the screws at the top of the sash with a 4mm hexagon key for VELFAC 200, and a Torx T20 screwdriver for VELFAC 400.

Cleaning. When the sash is fully opened, a gap is formed at the hinge side. This allows the external side of the sash to be cleaned from inside the building.

Care. Guide rails should be kept free of dust or dirt by cleaning with a soft brush or cloth. The slide rails should not be oiled as this will accumulate dust and dirt, and remove friction.



This window can be fitted with:

See more

Integral blind 42

Click vent 43

Fixed window

A fixed window cannot be opened and therefore requires no maintenance or adjustments of opening fittings.

Fixed windows can be converted to opening. Please call VELFAC Customer Service on 01223 897100 for more information.



Tophung projecting window

This window is opened by turning the handle to a vertical position and pushing the sash outwards.

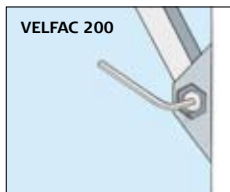
The window is closed by pulling the sash back to the frame and returning the handle to the horizontal position.

Friction arm adjustment. Friction can be adjusted by turning the friction screws at the sides of the sash using a



4mm hexagon key. Each screw is adjusted equally to keep the sash level and square.

Cleaning. Ensure that guide rails are free from dust and dirt.



This window is equipped with:

See more

Espagnolette handle	40
Ventilation position	41
Friction arm	43

It can also be fitted with:

See more

Espagnolette handle with child-lock	40
Espagnolette handle with lock	40
Espagnolette handle for cylinder lock	40
Electric opener for remote operation	41
PN-fitting	42
Integral blind	42
Safety restrictor	42
Lockable restrictor	43
Click vent	43

This window is equipped with:

See more

Safety catch	29
Espagnolette handle	40
Ventilation position	41
Safety restrictor	42
Friction arm	43

It can also be fitted with:

See more

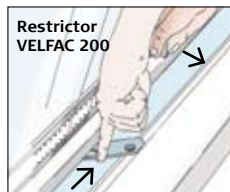
Espagnolette handle with child-lock	40
Espagnolette handle with lock	40
Espagnolette handle for cylinder lock	40
Electric opener for remote operation	41
PN-fitting	42
Lockable restrictor	43
Click vent	43

Reversible window

The window opens by turning the handle to a vertical position and pushing the sash outwards until the safety restrictor engages at an opening of 5-10cm.

The window is closed by pulling the sash back to the frame and returning the handle to the horizontal position.

The VELFAC 200 restrictor is disengaged by pulling the sash slightly back until loose

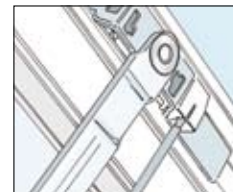


and the restricting arm moved to the side to deactivate.

VELFAC 400 has restrictors on both sides which need disengaging in sequence, right first then left.

Friction arm adjustment.

Friction is adjusted in VELFAC 200 by

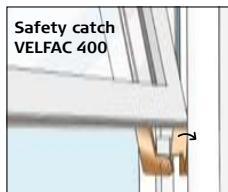


Reversible window

equally turning the screws at the sides of the sash anti-clockwise using a 3mm hexagon key. VELFAC 400 reversible windows have no friction arm.

Cleaning. The external side of the window can be cleaned from inside the building by reversing the sash.

When pushed outwards, the top of the sash can be pulled gently downwards



toward the bottom of the window. The sash is fully reversed when the catch engages to keep it in the cleaning position.

Large reversible windows have an additional safety arm which is moved outwards and fixed to the frame to ensure the sash is stable before cleaning.



When the sash has been cleaned, the catch and arm are disengaged and the bottom of the sash is guided back towards the top. The safety restrictor will automatically re-engage when the sash is closed.

DO NOT LEAN OUT OF THE WINDOW WHEN REVERSING SASH.

NEVER LEAVE WINDOW UNATTENDED WHILE RESTRICTOR IS DISENGAGED.



This window / door is equipped with:

[See more](#)

Handle

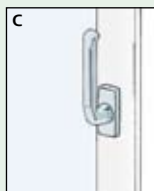
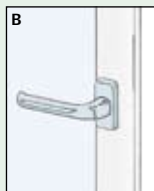
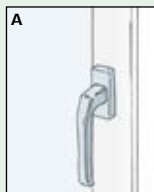
41

This window / door can also be fitted with:

[See more](#)

Trickle vent

43



Inward opening windows and patio doors

Inward opening windows and doors can be sidehung, bottomhung, or turn and tilt, which allows both sidehung and bottomhung functions. The sidehung opening function allows the window or door to be opened inwards by turning the handle 90° from A to B. A bottom hung window or door allows a 10cm ventilation gap at the top by turning the handle 180° from A to C.

A turn and tilt window or door allows both functions using the same handle positions.

To close the window or door, the sash is pushed back to the frame and the handle returned to position A.



2 leaf windows and doors. To open both leaves, the handle must be operated and the first leaf opened. Then the lever at the edge of second leaf must be operated to dis-engage the flushbolt . The lever must be re-engaged when closing.

Inward opening windows and patio doors

Care. The hinges require oiling at least once a year using acid-free oil.

In order to ensure the hinges are properly lubricated, the window should be opened and closed several times during and after oiling.



Adjustment of the sash

1. Height is adjusted in the bottom corner hinge using a 4mm hexagon key (D).

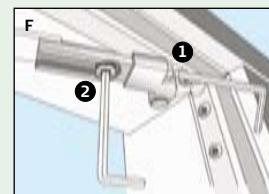
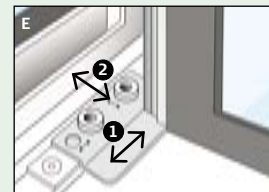
2. You can adjust sideways by turning the screw in front in the bottom corner hinge (E1), and/or by turning the screw in the

end of the scissor hinge located in the top frame corner (F1), both with a 4mm hexagon key.

Adjustment of closing

If you are not easily able to close the window or if the gasket is not tight, then you are able to adjust the pressure in the following ways:

- a) Turning the bottom corner hinge screw using a 4mm hexagon key (E2)
- b) Turning the top scissor hinge screw while the window is tilted (F2)
- c) Turning the locking pins on the side of the window with a Torx T15 screwdriver (G). Clock wise to loosen and anti clock wise to tighten.



The patio door is equipped with:

See more

Espagnolette handle	40
Ventilation position	41
Friction arm	43

It can also be fitted with:

See more

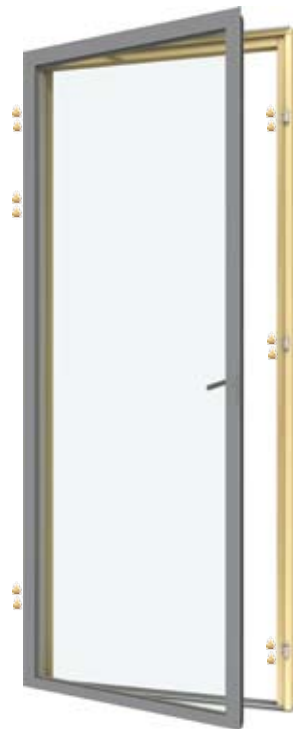
Espagnolette handle with child-lock	40
Espagnolette handle with lock	40
Espagnolette handle for cylinder lock	40
PN-fitting	42
Window stay	42
Integral blind	42
Click vent	43

Patio door

The patio door is opened by turning the handle to a horizontal position and pushing the door leaf outwards. The door opens to 90° and is equipped with a friction arm which allows it to be held in any position between closed and fully open. Doors can be fitted with a hinge to allow 180° opening but then cannot be fitted with a friction arm.

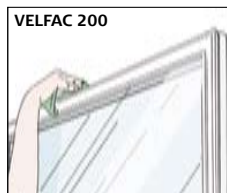
The patio door is closed by pulling back to the frame and returning the handle to the vertical position.

Double doors can be supplied with different types of mullion - see page 39 for more information.

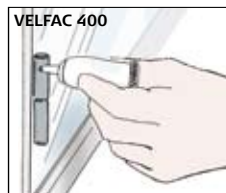


Patio door

Care. It is important to keep the slide rails free of dust and dirt by using a soft brush or cloth. The slide rails should not be oiled as this will accumulate dust and dirt, and remove friction.



The hinges require oiling at least once per year using acid-free oil. In order to ensure the hinges are properly lubricated, the window should be opened and closed several times during and after oiling.



Friction arm adjustment. The friction arm, found at the top edge, can be adjusted by turning the friction bolt using a 4mm hexagon key.



The sliding door is equipped with:

See more

Espagnolette handle 40

Ventilation position 41

It can also be fitted with:

See more

Espagnolette handle
with child-lock 40

Espagnolette handle
with lock 40

Espagnolette handle
for cylinder lock 40

Click vent 43

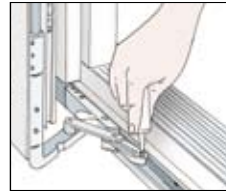
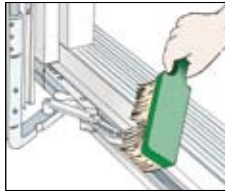
Sliding door

The sliding door is opened by turning the handles at the sides of the door leaf to a horizontal position. The door is then pushed outwards approximately 10cm and slid across.

The door is closed by sliding across and pulling back toward the frame. The handles are then turned back to a vertical position.



Care. The slide rails must be kept free from dust and dirt with a cloth or soft brush. The front 'carriage' - the hinge that moves in the slide rail at the leading edge of the door - must be oiled at least once a year.



The door can be fitted with:

see more

Trickle vent

s. 43



Flush door

Entrance door

The entrance door opens by pushing down the handle and opening outwards. The door leaf will open to 180°.

To close, the door is pulled back to the frame, where the latch re-engages.

To lock the door, the handle is lifted before turning the key or thumbturn.



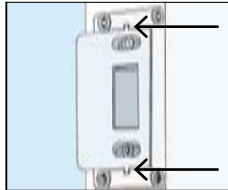
Care. The hinges require oiling at least once a year using acid-free oil. In order to ensure the hinges are properly lubricated, the door should be opened and closed several times during and after oiling.



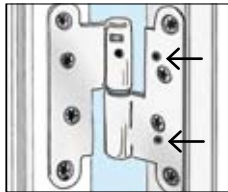
It is recommended that the door leaf of a flush door be painted every 5 years to maintain the finish.

Entrance door

Adjustment. The closing pressure may be adjusted by relocating the front section of the strike plate. The screw fittings are undone using a Torx T10 screwdriver, the pins on the front section removed, and the plate relocated.



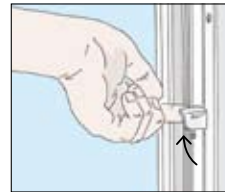
The door leaf can be adjusted sideways by loosening the hinge screws using a 3mm hexagon key, and the door adjusted to suit.



The height of the door leaf may be adjusted by turning the thread underneath the pivot of the middle hinge using a 6mm hexagon key.



2 leaf doors. To open both leaves, the handle must be operated and the first leaf opened. Then the lever at the edge of second leaf must be operated to dis-engage the flushbolt .



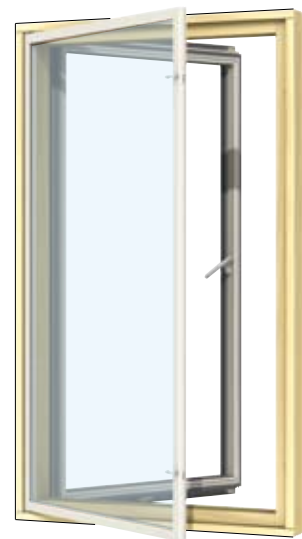
The internal sash is equipped with handles or screws.

2+1 window internal sash

The internal sash of a 2+1 window significantly improves acoustic and thermal properties. In order to constantly maintain this improvement, the internal sash must remain closed.

The internal sash can be supplied as sidehung or tophung and should only be opened for cleaning purposes. The sidehung sash is opened by turning the small handle(s) and pulling inwards. The tophung sash should be completely dismantled before commencing.

Dismounting a tophung internal sash. In order to remove the tophung sash, loosen the screws, hold down the



Sidehung



Tophung

top hinge pin and tip out the sash - this operation will require 2 persons.



Mullions for 2 leaf windows and patio doors



Fixed



Escape



French Casement

A fixed mullion cannot be moved when both sashes are open.

The escape mullion is fixed when both sashes are opened, but in an emergency, the flushbolt at the top of the mullion can be disengaged, and the mullion completely removed to allow a double escape opening.

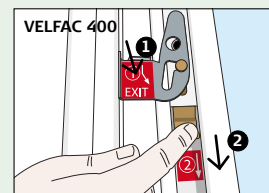
The French Casement mullion is fixed to the leading edge of the Sash 2. Once Sash 1 has been opened, flushbolts at the top and bottom of the mullion can be disengaged and Sash 2 subsequently opened. The mullion will move with the sash providing a clear opening for both sashes. The flushbolts of Sash 2 must be re-engaged before closing Sash 1.



Flush bolt for escape and French Casement mullion.



Handle for Sash 2 with narrow French Casement.



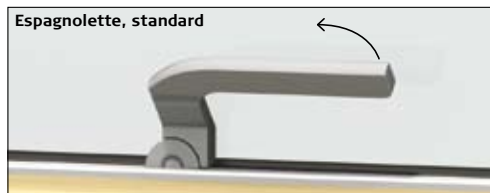
Operation of VELFAC 400 removeable mullion



Care. The locking mechanism at the leading edge of the sash will require oiling at least once a year using acid-free oil. Operate the handle during oiling to lubricate properly.

Tip. Standard Espagnolette handles can be changed to other options by VELFAC Customer Service.

Window handles



VELFAC windows are usually operated by Espagnolette handles, although electric motors can be fitted for remote operation. Espagnolette handles operate the locking mechanism at the leading edge of the sash.

Espagnolette with child lock.

Espagnolette handles can be fitted with a child-proof safety lock. This is a button which must be pressed at the same time as the handle is turned. The button



automatically re-engages when the sash is closed.

Espagnolette with lock. Lockable Espagnolette handles are available with a small key to provide greater security.

Espagnolette for cylinder lock.

Espagnolette handles can be supplied to fit cylinders as part of a key strategy around a building.

Ventilation, remote operation and other handles

Ventilation

position. All outward opening windows and doors are fitted with 2 stage keeps. The locking mechanism engages in stage 1 when fully closed. The sash can also be opened to approximately 1cm and the handle returned to the locked position in the second stage. This allows a ventilation gap whilst keeping the window secure.



N.B: Please note that some insurance companies won't cover losses from burglaries which have been committed when windows have been left in a ventilation position.

Electric motor.

The electric motor is operated using a wall mounted switch or a remote control. The motor chain must be kept clean and oiled.



Handle for inward opening windows and doors.



The handle can be used to operate sidehung and bottomhung opening functions.

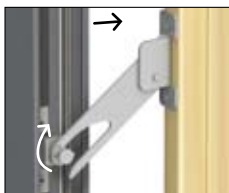
The handle is also available with a child lock and a key operated lock.

Safety fittings and other accessories

Safety restrictor.

This restrictor automatically engages when the sash is

opened to approximately 10cm. To open further, the sash is pulled slightly back until the restrictor is loose, then the restricting arm is moved to the side to deactivate. The restrictor arm must be back in place before the sash is closed - on closing, the restrictor will automatically re-engage.



PN fitting.

The fitting makes it difficult for unwanted guests to enter if the window is open.

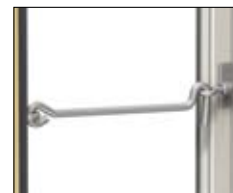
When opening the window, the arm is lifted and re-engaged when the required opening is achieved. The arm is raised to a vertical position to disengage, allowing the sash to open fully.



N.B: Please note that some insurance companies won't cover losses from burglaries which have been committed when windows have been left in a ventilation position.

Window stay.

The arm is fitted to the wood frame and when used, is hooked into an eyelet on the sash to achieve an opening of approximately 130mm.



Integral blind. Integral blinds within the double glazed unit are operated using a cord or an electric motor, depending on specification.



Safety fittings and other accessories

Lockable restrictor.

This restrictor limits the opening of the sash to 10cm.

It is possible to disengage the restrictor by turning the lock through 90° with a 5mm hexagon key. The lock must always be re-engaged after use.

Care must be taken to ensure the restricting arm is clear of the structure before being allowed to hang loose.



Friction arm.

This fitting allows the sash to be held in any position between closed and fully open, although the ventilation position should be used in bad weather. The friction arm can be adjusted if operation is too tight or loose - please consult pages which refer to your specific opening function.



Clickvent.

The vent is fitted within the frame and provides background ventilation.

The vent is opened by pressing one or both ends marked with circles.





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